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Approved For Release 2003/09/30 : CIA-RDP75B00285R000300140022-0  
S E C R E T

Copy 1 of 5

18 March 1974

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MEMORANDUM FOR THE RECORD

SUBJECT: Trip Report 4-14 March 1974

1. The purpose of this trip was to conduct tests on a prototype polycarbonate helmet at Brooks AFB, Texas, Davis Monthan AFB, Arizona, and [REDACTED]

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2. Brooks AFB, 5-6 March 74

On 5 March 74 the undersigned was joined by

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[REDACTED] and met with Dr.'s William Robertson and Richardson, USAF School of Aviation Medicine, to establish protocol for chamber flight tests on the polycarbonate helmet. Purpose of the test was to determine the amount of residual carbon dioxide (CO<sub>2</sub>) in the helmet. Ground level tests were conducted on 5 March. On 6 March additional testing was conducted at ground level, simulated altitudes of 8,000, 18,000, and 29,000 feet with no significant changes noted at the various altitudes. As there was no baseline established for standard pressure-suit helmets, a similar test was conducted on the S-1010 full-pressure suit helmet with almost identical results. Test reports will be forwarded to this office by Dr. Robertson as soon as they are available.

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USAF review(s) completed.

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3. Davis Monthan AFB, 7-9 March 74

The personnel of the Physiological Support Division were shown and briefed on the prototype helmet. Comments were received regarding apparent ease of maintenance. Available U-2 pilots of the 349th SRS were given the opportunity to try on the helmet and relate their constructive criticisms. Most all agreed there was great potential for this new approach and concept.

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4. 11-13 March 1974

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was briefed on the prototype helmet and was favorably impressed with the new concept. Project pilots tried on the helmet with the pressure suit and evaluated it for comfort and visual field. The complete assembly was evaluated in the cockpit to determine if vision was adequate to see all required panels. Additionally, chamber flights were accomplished by and the undersigned to determine comfort in the pressurized state. The consensus of opinions was that the new approach is good and would be well received. However, additional modification would have to be made before it would be an acceptable flight item.

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5. The prototype helmet will be discussed and shown at the Life Support Conference in the Surgeon General's Office on 19-20 March 74.

6. The undersigned also visited for an orientation visit.

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CONCURRENCE AND/OR COMMENTS

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22 Mar '74  
Date

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AMS/OSA [redacted] 18 Mar 73

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